

then value of the life estate, and deducting that value from the then price of the inheritance, or the absolute or renewable estate. Some such proportional valuation must have been made in each of these cases, as well as in those which relate to the discharge of mortgages, or other incumbrances; yet there is nothing to be found in the reports of any of them, or in the reports of those which involve the apportionment of incumbrances, or in those which relate to the abatement of specific legacies or to the adjustment of the amount for which an annuitant is to be admitted as a creditor against the estate of a bankrupt or insolvent, before the year 1750; which alludes to any positive rule of apportionment, or that indicates the principles by which the Court was governed in putting a present value upon a * life estate of any sort, or of apportioning any burthen between such an estate and a remainder or reversion depend- **227**
ent upon it. *Ryle v. Brown*, 6 *Exch. Rep.* 265; *Darley v. Singleton*, 6 *Exch. Rep.* 426.

The putting of a present value upon a life annuity, or upon a certain rent for life, or upon a specified annual life income of any description necessarily involves a consideration of the chances of life of the individual during whose life such an annual income is claimed; for although other matters must be taken into consideration in making an estimate of its present value; such as the sufficiency of the security, the probable punctuality of the annual payment, the general demand for the use of money, and the like; yet, it would be difficult to make any calculation as to the duration of a single life without the aid of some general observations as to the rate of mortality, and the probable duration of such lives in like situations. But a judicial controversy as to the present value of a particular life interest, being, in its nature, confined to an insulated subject, however dependent a full understanding and correct determination of it may be upon the doctrine of chances, cannot afford the means of collecting those facts and circumstances on which that doctrine rests, since the doctrine is itself the result of general observations upon those previously collected facts and circumstances, in relation to the duration of human life, whilst the adjudication must necessarily be, if it proceeds upon that doctrine at all, a mere application of it to the peculiar case. Hence it is, that, although judicial investigations may, in such cases, be greatly facilitated by a just application of that doctrine, there is no allusion to any rule for estimating the probable continuance of life to be met with, in any of the reported adjudications, until long after the publication of several essays upon the doctrine of chances in relation to the duration of human life.

Doctor Edmund Halley, an eminent mathematician of England, appears to have been the first who undertook to explain the doctrine of chances in relation to the probable duration of human life. About the year 1690, he published his *Essay on the Deter-*